

REMARKS

As a preliminary matter, Applicants wish to thank the Examiner for thorough examination of the present application as evidenced in the non-final Office action dated February 4, 2009. The present Amendment and Response is responsive to the non-final Office action dated February 4, 2009. Claims 1-20 remain pending with claims 1, 6-9, and 13 being amended. Claims 1, 6 and 8 have been amended as described below in the sections entitled "Claim rejections under 35 U.S.C. § 112" and "Claim rejections under 35 U.S.C. § 102." Claims 7, 9 and 13 have been amended to correct typographical errors.

Claim Rejections under 35 U.S.C. § 112

The Office objects to the use of the acronyms "INAP," "CAP," "MAP," "PSTN," and "SCP," and recommends that each be spelled out at least once in the claim. By the present amendment, claims 1, 6 and 8 have been amended and such acronyms have been replaced with the full name. In particular, the detailed amendments in the claims are as follows:

- "INAP" in claim 1 was changed to "Intelligent Network Application Part;"
- "CAP" in claim 1 was changed to "Customized Applications for Mobile network Enhanced Logic Application Part;"
- "MAP" in claim 1 was changed to "Mobile Application Part;"
- "SCP" in claim 6 was changed to "Service Control Point;"
- "PSTN" in claim 8 was changed to "Public Switched Telephone Network."

Claims 1-20 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the Office asserts that the limitation "next generation network" is not clear because it is not known what is considered as next generation network. The Office also asserts that the CAP and MAP recited in the parenthesis are confusing, and "encoding/decoding" is not clear because "/" was not defined. Claim 1 has been amended as follows:

- "next generation network" in claim 1 was changed to "Next Generation Network,"

- The parenthesis in claim 1 were changed to “an Intelligent Network Application Part (INAP), Customized Applications for Mobile network Enhanced Logic Application Part (CAP) or Mobile Application Part (MAP),”
- “encoding/decoding” in claim 1 was changed to “encoding or decoding.”

Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claims 1-20 under 35 U.S.C. § 112, second paragraph.

Claim Rejections under 35 U.S.C. § 102

Claims 1-20 are rejected under 35 U.S.C. § 102(b) as being anticipated by Finkelstein et al. (The Future of Intelligent Network). In order to properly establish that Finkelstein anticipates Applicants' claimed invention under 35 U.S.C. § 102(b), each and every element of each of the claims in issue must be found, either expressly described or under principles of inherency, in a single reference. Applicants respectively argue that the claims are patentably distinguishable from the cited reference.

Independent claim 1, as amended, calls for a Softswitch for a Next Generation Network, said Softswitch includes:

a network adaptive device for implementing the communication between the Softswitch and other devices in said Network, as well as receiving call requests;

a call server for determining whether the call received by said Network adaptive device is a common call or a call of the intelligent network and processing the common call; and

an Intelligent Network Application Part (INAP), including Customized Applications for Mobile network Enhanced Logic Application Part (CAP) and Mobile Application Part (MAP), adapter for responding the call of the intelligent network and encoding or decoding the INAP message.

As per the whole Softswitch

Finkelstein does not teach or suggest each and every limitation of claim 1. On the contrary, Finkelstein discloses a softswitch in lines 22-25 of the “Voice-Over-Packet Networks” section and states that “an access gateway connects the customer to the packet backbone network under the control of a device often referred to as a media gateway controller, softswitch, or call agent.”

In claim 1 (referring to a connection between a PSTN and NGN) the subject matter, the Softswitch lying in the NGN side, is used for providing call control and connection control functions to the services that have real-time requirements in the NGN, and is to further implement intelligent services in the NGN and interconnection of intelligent services between the PSTN and the NGN.

Finkelstein mainly discusses, particularly in the paragraphs the examiner mentioned, the call agent lying a in Voice-Over-Packet Network, which is a bridge connecting a PSTN and an NGN according to Figure 1 in Finkelstein, and is to implement intelligent services in the PSTN.

As per the network adaptive device and call server

Finkelstein discloses a network adaptive device and call server in lines 12-24 of the “The Intelligent Network” section and states that “the distributed functional plane, on which the IN protocols are defined, separates a service control function (SCF) from the service switching function (SSF) and connection control function (CCF). The SSF and CCF, typically provided by a conventional switching system, implement the basic call process for voice services. The SCF, introduced for IN, allows centralized service control logic for advanced services. When selected basic call processing events are detected by the SSF, the SCF is consulted for instructions. The SCF directs the SSF and CCF to establish desired voice calls and supporting connections.”

In claim 1 the network adaptive device is used for implementing the communication between the Softswitch and other devices in the NGN. Then the call server detects the call received by the network adaptive device. The call received by the network adaptive device is from the PSTN or the NGN based on the implementation in the NGN.

Finkelstein mainly concentrates on the SSF and CCF on the Intelligent Network side implementing the communication between the call agent and other devices in VOP or PSTN. Finkelstein fails to disclose that the SSF, CCF or SCF can determine whether the call received is a common call or a call of IN. Besides, the call received shall be from PSTN but NGN.

As per the Intelligent Network Application Part INAP

Finkelstein discloses INAP adaptive device in lines 35-46 of the “Voice-Over-Packet Network” section and states that “In addition to controlling the various gateways, the call agent could also support limited SCF capabilities to process service requests, and access IN capabilities in the PSTN for well-established services such as toll-free and number portability. The IN capabilities of a PSTN SCP can be accessed using Signaling System 7 (SS7)/Transaction

Capabilities Application Part(TCAP) via a signaling gateway. Other architectures may utilize TCAP over IP and use an IP network to communicate with an SCP. New alternative protocols are continually being developed.”

In claim 1 the INAP encodes or decodes the INAP message compatible for the devices on the NGN. Both sending the encoded INAP message to the other devices in the NGN or PSTN and receiving the decoded INAP message from the other devices in the NGN or PSTN must be based on the NGN for the Softswitch lying in the NGN side. Thus, the transmission protocol in the NGN must be distinct from the transmission protocol in the PSTN or VOP.

Finkelstein merely concentrates on the corresponding devices using Signalling System 7 (SS7) via a signaling gateway.

In light of the foregoing, Finkelstein does not teach or suggest each and every limitation of claim 1. As such, Applicants respectfully submit that claim 1 is allowable.

In addition, the prior art does not teach or suggest the features included in claim 1 that are not shown by Finkelstein. As such, the subject matter in claim 1 is non-obvious. Furthermore, the prior art does not cure the deficiencies of Finkelstein. Thus, Applicants respectfully submit the claim 1 conforms to the provisions of patentability as non-obvious.

As stated above, independent claim 1 is allowable. In addition, claims 2-5 depend from claim 1 and are allowable for these and other reasons.

Independent claim 6 is directed to a system for implementing an intelligent network including a Softswitch device, the system comprising:

- a network adaptive device for implementing communication between the Softswitch device and other devices in said network, as well as receiving the call request;

- a call server for determining whether a call received by said network adaptive device is a common call or a call of the intelligent network and processing the common call;

- an INAP adapter for responding to the call of the intelligent network and encoding/decoding the INAP message;

- at least one Service Control Point (SCP) for executing intelligent service logic and producing INAP messages; and

- an IP network for connecting said Softswitch device and the SCP.

Claim 6 is a corresponding system implementation of the softswitch claimed in claim 1 and comprises all the elements of claim 1, including at least one SCP and an IP network. Thus, based on the similar remarks with respect to claim 1 above, Finkelstein fails to teach or suggest each and every limitation of claim 6.

In addition, in claim 6, the IP network for connecting said Softswitch and the SCP can be the NGN or PSTN, and the SCP in claim 6 shall be configured in the NGN side or the PSTN side. When the call access is from the PSTN, the SCP on the NGN side is working on the call, and when the call access is from the NGN, the SCP on the PSTN side is working on the call. In contrast, Finkelstein fails to disclose a SCP on the NGN side to execute intelligent service logics and produce INAP messages based on the NGN. Finkelstein also fails to disclose the operations of the SCP on the PSTN side when the call access is from the NGN.

In light of the foregoing, Finkelstein does not teach or suggest each and every limitation of claim 6. As such, claim 6 is allowable.

In addition, the cited prior art does not teach or suggest the features included in claim 6 that are not shown by Finkelstein. As such, the subject matter in claim 6 is non-obvious. Furthermore, the prior art does not cure the deficiencies of Finkelstein. Thus, Applicants respectfully submit that claim 6 is non-obvious.

As stated above, independent claim 6 is allowable. In addition, claims 7 and 8 depend from claim 6 and are allowable for these and other reasons.

Claims 9, 13 and 17 are methods implemented by the softswitch claimed in claim 1 and the system claimed in claim 6, which comprises all the elements of claims 1 and 6. Thus, based on similar remarks with respect to claims 1 and 6 above, Finkelstein fails to disclose or suggest each and every limitation in claims 9, 13 and 17. Therefore, Applicants respectfully submit that claims 9, 13 and 17 are allowable.

Furthermore, the prior art does not teach the features included in claims 9, 13, and 17 that are not shown by Finkelstein. As such, the subject matter in claims 9, 13, and 17 is non-obvious. Furthermore, the prior art does not cure the deficiencies of Finkelstein. Thus, Applicants respectfully submit that claims 9, 13, and 17 conform to the provisions of patentability as non-obviousness.


As stated above, independent claims 9, 13, and 17 are allowable. In addition, claims 10-12 depend from claim 9, claims 14-16 depend from claim 13, and claims 18-20 depend from claim 17 and are allowable for these and other reasons.

CONCLUSION

The Applicants believe that they have responded to each matter raised by the Examiner. Allowance of the claims is respectfully solicited. It is believed that the present patent application, after the above amendments and statement of opinions, has overcome all the defects pointed out by the Examiner and is in conformity with the relevant provisions of Patent Law. The Applicants request early granting of patent right for this application. If there is still a problem that the Examiner believes is not overcome by the above amendments and statement of opinions, please give the Applicants another chance to make amendments and further clarification, explanation, or observation.

The undersigned is available for telephone consultation during normal business hours.

Respectfully Submitted,



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